



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,520	09/30/2003	Henning Gold	LF012	6103
52203	7590	02/15/2006	EXAMINER	
CONTINENTAL TEVES, INC. ONE CONTINENTAL DRIVE AUBURN HILLS, MI 48326-1581			SCHWARTZ, CHRISTOPHER P	
			ART UNIT	PAPER NUMBER
			3683	

DATE MAILED: 02/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/675,520	Applicant(s) GOLD ET AL.	
	Examiner Christopher P. Schwartz	Art Unit 3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Christopher P. Schwartz
CHRISTOPHER P. SCHWARTZ
PRIMARY EXAMINER

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/12/05 has been entered.
2. Claims 1-24 have been canceled. Claims 25-29 are currently pending.

Drawings

3. The drawings are objected to because in light of applicant's remarks of December 12, 2005 concerning the drawings it now becomes unclear if Figure 1 of the originally filed drawings is "prior art of record". If so, it should not have been deleted since such a deletion could constitute **new matter**. It should simply have been labeled "prior art", as figure 7 of the original drawings was. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief

Art Unit: 3683

description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 3824932 ('932) in view of either Taylor '520, Vossieck or the British patent '780.

Regarding claims 1-17 DE '932 discloses a gas spring damper having a similar structure to that of applicant's, as readily apparent from figure 2. Note the throttles at 66,68.

It is unclear how many and what the distribution or spacing of the nozzles are in the piston.

The British patent '780 shows such "throttles" in the several figures 2,3,5,11. Note the varying shapes provided and what may be considered to be "first, second and third tapered bore-holes" in figures 3 and 11 (see element numeral 9 in fig 3) due to the strong similarity between this design and that of applicant's. Such a design is old and well known, however. This conclusion is supported by the references to Taylor '520 and Vossieck.

Because it is notoriously well known in the art to vary the geometry of piston fluid passages (i.e. shape, cross section, size etc) to adjust the damping properties of an absorber or spring to predetermined desired criteria one having ordinary skill in the art at the time of the invention would have found it obvious to have modified the passages 66,68 of DE '932 as taught by GB '780 or Taylor or Vossieck.

Applicant's limitations in the remaining claims directed to the specifics of the shape of the piston fluid passages are simply an obvious alternative design equivalent of the piston fluid passages in DE '932, as modified above, simply dependent upon the damping characteristics of the spring desired.

Art Unit: 3683

7. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over DE 3824932 ('932) in view of either Taylor '520, Vossieck or the British patent '780, as applied to claim 25, and further in view of Yamaoka.

Regarding claim 29 Yamaoka discloses in column 7 lines 27-36 that "the difference between the fluid pressures before and behind each of the first and second constant orifices ... is decreased and the flow velocity of the working fluid passing through each of the orifices is decreased gradually so that the Reynolds number of the fluid passing through the respective orifices is decreased". This reduces fluid noise. It can therefore be seen it is known to vary the geometry of piston fluid passages (i.e. shape, cross section, size etc) to vary the fluid flow through the piston dependent upon the level of damping forces desired and/or to prevent unwanted noise. It is also notoriously well known to vary the shapes and sizes dependent upon what type of fluid flow is desired – laminar or turbulent. Although not applied see the references to Dressell '101, de Carbon '864 and Tokasz for a discussion of turbulent and laminar fluid flow(s) as related to the size and/or shape of the flow orifices.

8. Claims 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art of originally filed figure 1 of applicants drawings, in view of either Taylor '520, Vossieck or the British patent '780.

Regarding claim 25, in light of applicant's remarks filed December 12,2005 concerning the drawings, figure 1 of applicant's originally filed drawings shows all the claimed structure except for the details of the nozzles.

Taylor '520 or Vossieck or GB '780 are relied upon as explained above.

9. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art of originally filed figure 1 in view of either Taylor '520, Vossieck or the British patent '780, as applied to claim 25, and further in view of Yamaoka.

Regarding claim 29 Yamaoka is relied upon as explained above.

Response to Arguments

10. Applicant's arguments filed 12/12/05 have been fully considered but are moot in view of the new grounds of rejection.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Schwartz whose telephone number is 571-272-7123. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim McClellan can be reached on 571-272-6786. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

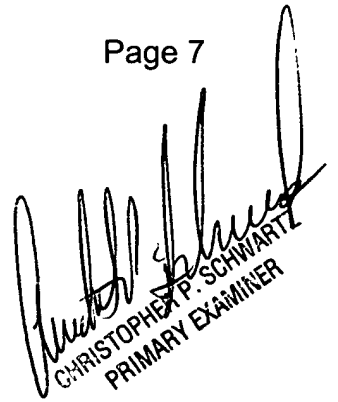
Application/Control Number: 10/675,520

Art Unit: 3683

Cps

2/13/06

Page 7


CHRISTOPHER P. SCHWARTZ
PRIMARY EXAMINER